

Appl. No. 09/957,456
Amdt. Dated February 26, 2004
Reply to Office action of November 26, 2003

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently amended): A method of identifying a modulator of chondrogenesis comprising:

- (a) providing primary limb mesenchymal cells capable of differentiating into chondroblasts or chondrocytes;
- (b) transiently transfecting the cells with a nucleic acid construct comprising a reporter gene that comprises a sequence upstream of the promoter from the type II collagen gene (Col2a1) that binds to ~~an endogenous protein in the cells that is changed upon chondroblast or chondrocyte differentiation~~ the transcription factor Sox9 that is endogenous to the cells;
- (c) adding a test compound to the transfected cells; and
- (d) determining the effect of the test compound on the reporter gene activity, wherein a change in reporter gene activity as compared to a control indicates that the test compound modulates chondroblast or chondrocyte differentiation.

Claims 2-5 (cancelled).

Claim 6 (previously amended): A method according to claim 5 wherein the nucleic acid construct comprises at least one Sox9 binding site, and further comprises a promoter and a detectable marker.

Claim 7 (Original): A method according to claim 6 wherein the nucleic acid construct contains four Sox9 binding sites.

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Claim 8 (Original): A method according to claim 6 wherein the marker encodes a luciferase or an enhanced green fluorescent protein.

Claim 9 (Original): A method according to claim 6 wherein the nucleic acid construct is pGL3(4X48)-luciferase as shown in Figure 6.

Claim 10 (Original): A method according to claim 6 wherein the nucleic acid construct is pGL3(4X48)-enhanced green fluorescent protein as shown in Figure 6.

Claim 11 (Canceled).

Claim 12 (previously amended): A method according to claim 1 wherein the cells form a confluent monolayer with precartilaginous condensations evident within 24 hours.

Claim 13 (Original): A method according to claim 1 wherein the test compound is a nucleic acid molecule comprising a test gene that is transfected into the cells.

Claims 14-26: (Canceled).